

BIBLIOGRAPHY.

RECENT ADDITIONS TO THE WEATHER BUREAU LIBRARY.

C. FITZHUGH TALMAN, Professor in Charge of Library.

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies:

Ångström, Anders.

- Applications of heat radiation measurements to the problems of the evaporation from lakes and the heat convection at their surfaces. 16 p. 24 $\frac{1}{2}$ cm. (Separate from *Geografiska annaler*, Stockholm. 1920, H. 3.)

Barros Fournier, Luiz Mariano de.

- O problema das seccas do nordeste. Rio de Janeiro. 1920. 165 p. 23 cm.

Besson, Louis.

- La classification détaillée des nuages en usage à l'Observatoire de Montsouris. Paris. 1921. 22 p. 25 cm.

Bragg, William.

- The world of sound. London. 1920. 196 p. 19 $\frac{1}{2}$ cm.

Eredia, Filippo.

- Le abbondanti piogge del settembre 1920 sul Veneto orientale. 24 p. 25 cm. (Estratto dagli Annali del Consiglio superiore delle acque, Roma. An. 1921. Fasc. 2.)

Great Britain. Meteorological office.

- Cloud forms according to the international classification. The definitions and descriptions approved by the International meteorological committee in 1910. With an atlas of photographs of clouds selected from the collection of Mr. G. A. Clarke. London. 1921. 10 p. 24 plates. 24 $\frac{1}{2}$ cm.

Harwood, W. A.

- Cloud observations made in India between 1877 and 1914. Calcutta. 1920. p. 537-565. 24 plates. 30 cm. (Indian met'l dept. Memoirs. v. 22, pt. 5.)

Huntington, Ellsworth, & Cushing, Sumner W.

- Principles of human geography. New York. 1921. 430 p. 23 $\frac{1}{2}$ cm.

Johansson, Oscar V.

- Meteorologins ståndpunkt och nyare sträfvanden i Skandinavien samt synpunkter för dess framtidiga utveckling i Finland. Helsingfors. 1918. 71 p. 23 $\frac{1}{2}$ cm. (Finska vetenskaps-soc. Bidrag. H. 78, no. 3.)

Korhonen, W. W.

- Untersuchungen über die Niederschlagshöhe in Finnland. Helsingfors. 1921. 98, 93 p. 25 cm. (Suomen valtion meteorologisen keskuslaitoksen toimituksia, no. 9.)

Milankovitch, M.

- Théorie mathématique des phénomènes thermiques produits par la radiation solaire. Paris. 1920. 339 p. 23 $\frac{1}{2}$ cm.

Netherlands. K. Nederlandsch meteorologisch instituut.

- Oceanographische en meteorologische waarnemingen in den Atlantischen oceaan. December, Januari, Februari, 1870-1914. Tabellen. Utrecht. 1919. 213 p. 32 cm.

Redway, Jacques W.

- Handbook of meteorology. New York. 1921. 294 p. 22 cm.

Richardson, Lewis F.

- Cracker balloons for signaling temperature. London. 1921. p. 97-115. 24 cm. (Gt. Brit. Met'l office. Professional notes, no. 19.)

Richardson, Lewis F.

- Lizard balloons for signaling the ratio of pressure to temperature. London. 1921. p. 75-93. 24 cm. (Gt. Brit. Met'l office. Professional notes, no. 18.)

Störmer, Carl.

- Exemples de rayons auroraux dépassant des altitudes de 500 kilomètres au-dessus de la terre. Kristiania. 1921. 5 p. 2 pl. 31 cm. (Geofysiske publ. v. 2, no. 2.)

Störmer, Carl.

- Rapport sur une expédition d'aurores boréales à Bossekop et Store Kornes pendant le printemps de l'année 1913. Kristiania. 1921. 269 p. 104 plates. 31 cm. (Geofysiske publ. v. 1, no. 5.)

Sutton, J. R.

- A contribution to the study of the rainfall map of South Africa. p. 367-414. 13 maps. 25 $\frac{1}{2}$ cm. [Excerpt from Roy. soc. S. Africa. Trans., Capetown. v. 9, pt. 4, 1921.]

RECENT PAPERS BEARING ON METEOROLOGY AND SEISMOLOGY.

C. F. TALMAN, Professor in Charge of Library.

The following titles have been selected from the contents of the periodicals and serials recently received in the Library of the Weather Bureau. The titles selected are of papers and other communications bearing on meteorology and cognate branches of science. This is not a complete index of all the journals from which it has been compiled. It shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau.

Aeronautical journal. London. v. 25. Aug., 1921.

- Ritchie, E. G. Effect of atmospheric pressure and temperature upon the performance of a petrol engine. The use of super-compression in aero engines. p. 421-454.

American philosophical society. Proceedings. Philadelphia. v. 60. no. 1. 1921.

- Hobbs, William Herbert. The fixed glacial anticyclone compared with the migrating anticyclone. p. 34-42.

American society of heating and ventilating engineers. Journal. New York. v. 27. July, 1921.

- Katz, S. H., & Trostel, L. J. Comparative tests of air dustiness with the dust counter, konometer, and sugar tube. p. 519-528.

Annales de géographie. Paris. 30 an. 15 juil., 1921.

- Gaußen, H. Pluviosité estivale et pénétration de la végétation méditerranéenne dans les Pyrénées françaises. p. 249-256.

Association of American geographers. Annals. New York. v. 10. 1920.

- Cox, H. J. Weather conditions and thermal belts in the North Carolina mountain region and their relation to fruit growing. p. 57-68.

- Smith, J. Warren. Rainfall in the great plains in relation to cultivation. p. 69-74.

- Whitbeck, R. H. The influence of Lake Michigan upon its opposite shore, with comments on the declining use of the lake as a waterway. p. 41-55.

Ciel et terre. Bruxelles. 37 an. Mai-juin, 1921.

- Descheyrens, Marc. Singulier phénomène de résonance électrique dans un circuit aérien. p. 89-93.

- Jaumotte, J. Le bulletin quotidien du temps. p. 69-74.

France. Académie des sciences. Comptes rendus. Paris. T. 172. 1921.

- Wehrle, Ph. Sur la notion de période dans l'étude des noyaux de variations de pression. p. 324-327. (l. août.)

France. Bureau central météorologique. Paris. Annales, 1914. Mémoires.

- Angot, Alfred. Études sur le climat de la France. Régime des pluies. Pt. 4. Région du sud-est; résumé général. p. 67-156.

- Brazier, M. C.-E. Recherches expérimentales sur les moulins anémométriques. p. 157-300.

Geographical journal. London. v. 58. Aug., 1921.

- The function of cyclonic activity in the interchange of polar and equatorial air. p. 148-149.

Great Britain. Meteorological office. Monthly meteorological charts, East Indian seas. Aug., 1921.

- Smith, H. T. Marine meteorology. History and methods.

India. Meteorological department. Calcutta. Memoirs. v. 22, pt. 5. 1920.

- Harwood, W. A. Cloud observations made in India, 1877-1914.

International institute of agriculture. Rome. International review. v. 11. July-Aug., 1920.

- Monti, G. Climate of Cyrenaica with special reference to its influence in the cultivation of cereals. p. 819-820. [Abstract.]

- Uphof, J. C. T. Effect of temperature on the geographical distribution of different species of *Opuntia*. p. 823-825. [Abstract from Journal of ecology, London.]

- Wickson, E. J. Climate of California and its effect on the growth of fruit trees and vines. p. 821-823. [Abstract.]

Journal de chimie physique. Paris. v. 15. 1917.

- Guye, Ph.-A. Sur les variations de la densité de l'air et la loi de Loomis-Morley. p. 561-576.

- Meteorological magazine. London. v. 56. July 21, 1921.*
 Newnham, E. V. The problem of forecasting periods of drought. p. 153-155.
 On the design of rain gages. p. 142-145.
- Whipple, F. J. W. The case for modern units in meteorology.* p. 145-147.
- Meteorologische Zeitschrift. Braunschweig. Bd. 38, H. 7. 1921.*
 Conrad V. Bericht über G. C. Simpson, Britische antarktische Expedition 1910 bis 1913. p. 193-199.
 Exner, Felix. Zur Darstellung des Polarisationsgrades des Himmelslichtes. p. 220-231.
 Ficker, Heinrich. Über Verschiebung der Polarfront. p. 217-218.
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 Köppen, W. Bodeneis und Eisboden. p. 214-216.
 Pollak, Leo Wenzel. Ein Temperaturindikator für Pilotballone. p. 209-212.
 Schmidt, Adolf. Zur Frage der ablenkenden Wirkung der Erddrehung. p. 212-214.
- Nature. London. v. 107. 1921.*
 Harding, Charles. Great British droughts. p. 627-628. (July 14.)
 Shaw, Napier. The air and its ways. p. 653-655. (July 21, 1921.)
 Cave, C. J. P. International exploration of the upper air. p. 761-762. (Aug. 11, 1921.)
 Hunter, J. de Graaff. Atmospheric refraction. p. 745. (Aug. 11, 1921.)
- Nature. Paris. 49 année. 1921.*
 Lévine, Joseph. Le climat de Paris. p. 91-93. (6 août.)
 Touchet, Em. L'aurole marine et l'aurole des aviateurs. p. 94-95. (6 août.)
 Humphreys, W. J. Les phénomènes sonores dans la nature. p. 98-100. (13 août.) [Abstract.]
- Philosophical magazine. London. v. 42. July, 1921.*
 Duffield, W. G., & Littlewood, T. H. The correction of a marine barometer for errors due to swinging. p. 166-173. [Abstract in this REVIEW. p. 412.]
 Milne, E. A. Sound waves in the atmosphere. p. 96-114.
 Relf, E. F. On the sound emitted by wires of circular section when exposed to an air current. p. 173-176.
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- Physikalische Zeitschrift. Leipzig. 22. Jahrg., no. 11. 1921.*
 Wieselberger, C. Neuere Feststellungen über die Gesetze des Flüssigkeits und Luftwiderstandes. p. 321-328.
- Popular astronomy. Northfield, Minn. v. 29. Aug.-Sept., 1921.*
 Fisher, Willard J. Low sun phenomena. No. 4. The "green flash." p. 383-393.
- Revue générale des sciences. Paris. 32 année. 30 juillet, 1921.*
 Rouch, Jules. Les statistiques et la prévision du temps. p. 427-430
- Royal meteorological society. Quarterly journal. London. v. 67. April, 1921.*
 Clarke, G. Aubourne. An unusual pilot-balloon trajectory. p. 117-121.
 Hooker, Reginald H. Forecasting the crops from the weather. p. 75-99.
 Salter, M. de Carle S. New method of constructing average monthly rainfall maps. p. 101-116.
- Royal society of London. Proceedings. London. Ser. A., v. 99. No. 4700, 1921.*
 Brunt, D. Dynamics of a revolving fluid on a rotating earth. p. 397-402.
- Seismological society of America. Stanford university Bulletin. v. 2, no. 1. 1921.*
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 Hodgson, Ernest A. The variable velocity of L waves. p. 58-62.
 Palmer, Andrew H. California earthquakes during 1920. p. 7-14.
 Rolfe, Frank. The southeastern section of the Seismological society. p. 4-5.
 Taber, Stephen. The Los Angeles earthquakes for July, 1920. p. 63-79.
 Vickery, Frederick P. The apparent intensity of earthquake shock in alluvial areas. p. 80-82.
 Wood, Harry O. On a piezo-electrical accelerograph. p. 15-57.
- Società sismologica italiana. Bollettino. Modena. v. 22, no. 5-6. 1919.*
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- South African journal of science. Johannesburg. v. 17. April, 1921.*
 Gortze, E. Rainfall and barometric variation in Bulawayo. p. 155-157.
- Morrison, J. T. Note on a diagram showing the amount of available sunshine falling on a horizontal surface on any day of the year at a given place, showing also the sun's elevation and its times of rising and setting. p. 227-230.*
- Tyco-Rochester. Rochester. July, 1921.*
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- Pearson, S. K. Season of severe storms. p. 11-12.*
 Russell, C. P. He saves money by foreseeing the weather. p. 20-21.
- U. S. Air service. New York, v. 4. July, 1921.*
 Cloud formation by supercharged plane. p. 13. [Reprinted, this REVIEW, p. 412.]
- U. S. Department of agriculture. Yearbook. 1920.*
 Smith, J. Warren. Speaking of the weather. p. 181-202.